avic

VIEW·i HD

User Manual ver 1.10

Please read carefully before using this product.

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1. Liability

1. This product was designed to assist you in driving safely
   by recording driving information and data for
   driver reference.

2. This product does not guaranteed to record information
   on every accident.
- A minor force will not trigger the G-Force sensor to activate
   Event Recording. Therefore the user must use the Manual Record
   Button located on the device itself.

3. This product is not liable for any data loss caused by
   physical damage to the product or it accessories.

4. The manufacturer has no liability for any injury or damage
   to property associated with the use of this product

5. The manufacturer limits any and all liability to the exclusive remedies
   of product repair or replacement at the manufacturer's discretion,
   to the fullest extent permitted by the law

2. Precautions (Device)

Do not open/fix/alter this device
Any customer alterations will void the
warranty

**Do not use any accessories other then
those included with the recorder**
The use of any additional accessories will
void the product warranty

**Only use manufacturer's power connecting
cable in direct connection to car battery**
The Use of any other power cable will void the
product warranty
[Caution] Manufacturer is not liable for any problem
occurring if manufacturer's power cable is not used

**Disconnect power from device after long use of
direct power connect to car battery**
Failing to do so may result in battery discharge

**Remove all substance from the lens, including
the plastic film, that may affect the quality of
the recording Any obstruction may degrade
recording quality.**

**Do not expose this product to extreme
temperatures (high or low)**
This product will be damaged if it is exposed
outside recommended working temperature

**Do not spray automobile cleaning products
directly to product**
Product will be damaged if directly exposed to
cleaning products

**Do not operate product while driving
Only operate in safe environments**

**Only install this product within the recommended
installation area**
It could result in poor GPS reception

**If product is physically damaged during a fatal
accidents, the recorded data may get damaged
and not be able to recover them**

**During sudden lighting changes, such as entering
a dark runnel, alley, or turning toward direct
sunlight on a very bright day, video recording may
be compromised and video may be at poor quality**

**Check the product frequently to ensure that the
camera angle is properly adjusted**
After violent force is applied to the vehicle or product,
the camera angle may be altered resulting in poor
picture quality

2. Precautions (Micro SD Card)

Only use MicroSD memory card from the manufacturer
Product may not function correctly if un-tested MicroSD memory cards is used

Do not open/fix/modify MicroSD memory card
Product could be damaged and warranty does not cover such damage.

MicroSD memory card need to be replaced with a new product after 6month use or more Product might malfunction if MicroSD card's writing speed decreases.

**Check MicroSD memory card's data regularly to check its operation**
[NOTE] Format SD memory card at least once a week for optimal performance

Backup from MicroSD memory card to HDD or CD/DVD if any data needs to be preserved
Data might get lost due to memory corruption in SD memory card.

Causion : Important data have to backup before format.
The format will delete all data.
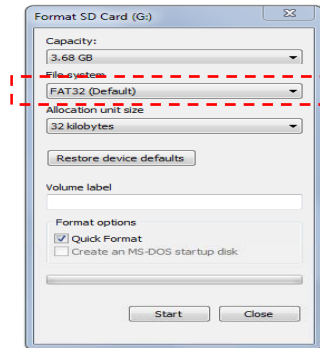
HOW TO FORMAT SD CARD
1. Connect MicroSD Card to user PC
2. Select [Start] -> [My Computer]
3. Select SD card driver and right click and select "Format"
4. Select "FAT32" If "FAT" format is to be selected, device will not function normally
5. Click "Start" button
6. If you want to format the MicroSD card at device, please reference page 13.
Do not remove SD memory card during product operation while power is on
Product or SD memory card could be damaged.

Manufacturer is not liable for MicroSD card's recorded contents outside its limited product life

3. Product Package

Please contact your sales vendor if your are missing any components or components are at fault

B A S I C P A C K A G E			
Device	MicroSD Card + Adopter (Include PC Player)	Cigar jack Power Cable	User Manual
Mount & Double-side Tape X2	Wire Clip	IR Lighting (Include in Certain Model Only)	Rear View Camera (Include in Certain Model Only)

O P T I O N			
Video out Cable	MicroSD Reader	Battery Direct Power Cable	Anti-Battery Discharge Unit

4. Functions

Function	Description
Normal Recording	**Records everything during device power on status** [NOTE] If memory exceeds its capacity, device deletes oldest file to make room for new recordings. Therefore, if user wants to keep the old recordings, user must backup the recordings before they are automatically deleted
Event Recording	**When device detects exceeded force in the device, device automatically saves 10 seconds before and after of the triggered event.** (Reference: 7.Product Manual)
Fixed Recording	**If device can't detect any movement, such as in parking, device will automatically set itself to fixed recording mode. Fixed Recording mode will save more recording/hour then normal Recording Mode. When device's camera detects movement or G-sensor detects change of force, it will trigger event recording mode and save them under event recording folder**
Audio Recording	**Supports audio recording with on/off button** (Reference: 7. Product Manual)
TV-out	**User can check recorded files to nearest display with TV-out function** (Reference : 5. Features)
HD Recording	**HD recording at 1280x720 pixel @ 30fps Max.**
Power Safe	**Supporting safe power off with internal saved power to protect deletion of last video before power cut**

4. Functions

Function	Description
Additional Wire Camera	**Additional camera can be connected via "Video-in" port to enable 2 camera recording** (for device including 2 cameras, 2nd camera can be toggled between on-device and wire input camera)
Status LED	**Blinking status LED is positioned in front of the device to alert other as a warning**
Sound Guidance	**Device will guide users via sound communication for easier product experience**
Image Capture	**User can capture image files from video recording**
Google Map Sync	**View driver's route in Google Map embedded in PC Player** [NOTE] GPS needs to be connected to the satellites in order to sync data with Google Maps
View-i PC Player	**PC Player can be used to check recorded videos on MicroSD card**
G-Sensor Analysis	**View G-force data in PC Player to check wild driving habits or to build better driving habits thus achieving safe driving habits**

5. Features

#	Name	Description
①	Power Port	DC 12V~24V
②	Internal GPS	Detect GPS info, time, and speed
③	Front Camera	2M Pixel CMOS Image Sensor
④	Mini USB Port	5V 400mA power input
⑤	Video-in Port	Connect wire camera for rear view or other angles
⑥	TV-Out Port	Preview/Replay recorded files to nearest display (NTSC/PAL)
⑦	Speaker	Voice communication and guidance
⑧	LED Status	Red : Power / Blue : GPS Reception / Yellow : Microphone On or Off Status
⑨	Mic Button	Sound recording on/off button
⑩	Power Button	Power on/off button
⑪	Manual Record/ Memory Format	Manual Event Recording trigger or Manually format MicroSD card
⑫	Mic	Records audio sounds
⑬	Internal Camera	1.3M Pixel CMOS Image Sensor (installed in specific models only)
⑭	MicroSD Slot	MicroSD card input slot
⑮	IR Lighting	IR Lighting (included in specific models only)

6. Installation

6.1 Recommendation

Place device near rear view mirror to the driver side where GPS and Camera does not have physical interrupts (sedan standard)

[Caution] Placing device other then recommended area may cause foul recording or GPS reception problem. Such as heat wire or filmed windows may cause poor GPS reception.

6.2 MicroSD Card Installation

• Insert MicroSD Card in same direction as the picture. Push hard until "click" sound is heard
• Push in the card to release and pull in out

•Pull down Lock switch

6.3 Installing Device to Window Mount

• Attach double side tape to window mount shown in left picture

• Slide in window mount to device until you feel a locking force
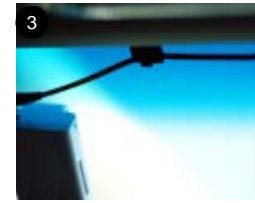• Remove outside cover of double side tape

6. Installation

6.4 Attaching Device to the Window

1

• Attach Device to recommended area

2

• Connect power plug to the device and plug in cigar jack power

3

• Organize power cable with wire clip

4

• Adjust camera angle to best position

5 IR LED Attachment (RUBY Product)

• Remove cover wrapping from IR lighting device

• Attach IR device as shown in above picture
• Connect power plug

[Caution] Remove all substance from the lens, including the plastic film, that may affect the quality of the recording Any obstruction may degrade recording quality

6. Installation

6.5 Installing rear view camera

• Guide cables as shown in above picture in installation

• Plug in cable to device's "Video-In" port

[Caution #1] Do not power on the device during cable connection.
Device will not recognize rear view camera if device is turned on and lead to malfunction.

[Caution #2] Remove all substance from the lens, including the plastic film, that may affect
the quality of the recording. Any obstruction may degrade recording quality

6.6 Device Working Confirmation

1. Confirm MicroSD card is inside the device
2. Confirm if power cable is correctly connected
3. Start your engine and see red LED is turned on and you hear a sound "ding-dong"
4. If all above is true, then device is working correctly and started recording after "ding-dong"
5. Blue LED will blink for few minutes and will stay lit after GPS reception is made

7. Product Manual

#	Function		Description	Sound
①	Event Recording Trigger / Memory Format Button	Short Push	Push this button to trigger event recording. Record each 10secconds before and after of trigger.	Ding-dong~
		Long Push	Push over 3 seconds to start memory formatting. "Ding" sound will appear in memory format start and "Ding-dong" will sound when it is finished	Ding~/Ding~dong~
②	Power Button	Short Push	Push to power on the device	Ding-dong~
		Long Push	Push over 3 seconds to power off the device	Ding-dong~
③	Audio Recording Button/ Camera mode Change Button	Short Push	Push to turn on/off Audio recording function (Yellow LED on/off)	Ding~
		Long Push	Push this button more then 3 seconds will change camera mode from 2CH ->1CH, vise versa. (only applies to 2CH products)	Ding~
④	Power LED		Red LED, Power On/Off status indicator	
⑤	GPS LED		Blue LED, Recording Status and GPS status indicator	
⑥	Mic LED		Yellow LED, Mic On/Off status indicator	

7. Product Manual

7.1 Buzzer/LED Scenario

Name	Sound	LED
Booting Status	Ding-dong	Red LED : On Blue LED : On Yellow LED : On
SD Card Insert Status	If SD card is not inserted, Device will make "Ding" sound every second	Red LED : On Blue LED : On Yellow LED : On
Normal Recording Status	Silent	Red LED : On Blue LED : Operate according to GPS status Yellow LED : Operate according to Mic status
GPS Reception Status	Silent	Red LED : On Blue LED : Blink = search / On = GPS connect Yellow LED : operate according to Mic status
Event/Manual Recording Status	Ding-dong	Red LED : On Blue LED : Blink (Fast Blink = 0.5 sec) Yellow LED : Blink (Fast Blink = 0.5 sec)
Mic On/Off	Ding	Red LED : On Blue LED : Operate on before scenario Yellow LED : On/off according to Mic status
Power Off Status	Ding-dong	Red LED : Off Blue LED : Off Yellow LED : Off

8. PC Player Manual

This part of the manual explains the use of PC Player, video and utility player.
With PC Player, user may view the contents of products.
* Windows Media Player and other player may show videos but G-Sensor, GPS, MAP, Report functions can only be used in PC Player.

8.1 System Requirement

Item	Description
Operating System	Window XP, Windows Vista, Windows 7
CPU	Pentium 4 / 2.4Ghz Processor or above
RAM	More then 2GB
Free HDD Space	More then 200MB
Display	More then 1600 x 900 pixels

8.2 Installing the Software

1. Connect the supplied PC Player to computer
2. Click [Start] and enter [My Computer] on your computer
3. Select drive that be including the PC Player and open the drive
3. Double click "setup.exe" file on the drive
4. Follow installation instructions
6. Select [Start]->[Programs]->PC Player to start the application

8. PC Player Manual

8.3 PC Player

Double click on "icon" to view the below screen.
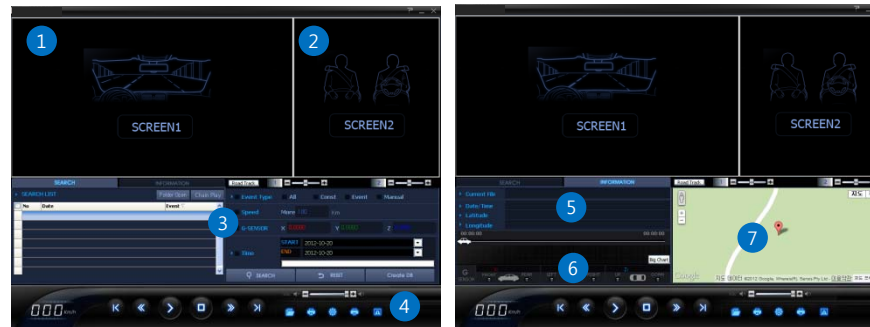
#	Name	Description
①	Front Video Screen	Display front video recordings
②	Second Video Screen	Display second video recordings
③	Search	Search recorded files based on user preference
④	Speed-o-meter / Menu	Display driving speed Button listing for video and menu control
⑤	File Information	Displays file name and recording type Displays GPS information
⑥	G-Sensor Graph	G-sensor data of video screen for user analysis
⑦	Google Map	Displays current position of the video on Goggle map

8. PC Player Manual

8.4 Buttons

Button	Description	Button	Description
	Previous File		Open 1 file
	Rewind		Print Screen
	Play		ECO-Drive Report
	Pause		Event Report
	Stop		Setting
	Fast-forward		Next File

8.5 Control Bar

Front video brightness adjustment

Second video brightness adjustment

Volume Control : Video volume control with mute function

8. PC Player Manual

8.6 Open File / Play

• Recorded contents can be found inside device's SD card.
  Constant files can be found under "NORMAL" folder / folder name under date/hour.
• Event files are made when G sensor settings are exceeded and can be found under
  "EVENT" folder.
• Move the recorded videos to user computer for best performance.
 (video play navigation, search, etc)

1. Opening single file and playing
   Click on the   button located lower part of PC Player.
   Navigate to the folder to find the wanted play contents and double click
   on the video file to play.

2. Opening a folder and playing
   • Click on "Folder Open" button on the top right of Search screen.
   • Navigate to the folder of user choice and select "OK" button
   • When the file list appears in the Search screen, check the checkbox in the
     left of the file name and click on "Chain Play" to play the videos.
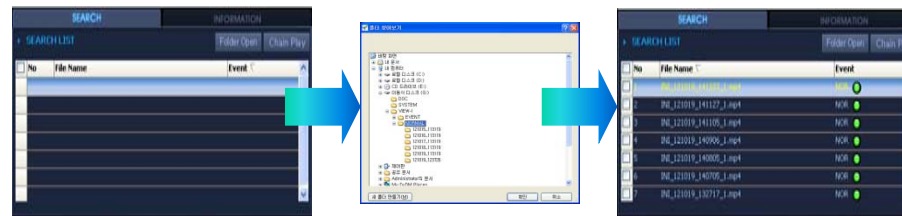
8. PC Player Manual

8.7 File List Screen

#	Name	Description
①	Folder Open	Open a folder with recorded videos
②	Chain Play	Play button for continual playing of checked listed files
③	File Name	File name consist of date/hour of recordings. EVT121019_113241_1.mp4 -> EVT or INI : Recording type -> 121019 : 12/10/19 (date) -> 113241 : 11:32:41 (time)
④	Event Type	Displays recording type. (EVT : Event / EMG : Manual NOR : Constant)

• File can be organized by clicking on the top File Name, Event titles

#	Name	Description
⑤	NOR	Constant recording files display as "NOR"
⑥	EVT	G-Sensor triggered recording files display as "EVT"
⑦	EMG	Manual button triggered recording files display as "EMG"

8. PC Player Manual

8.8 Search - DB
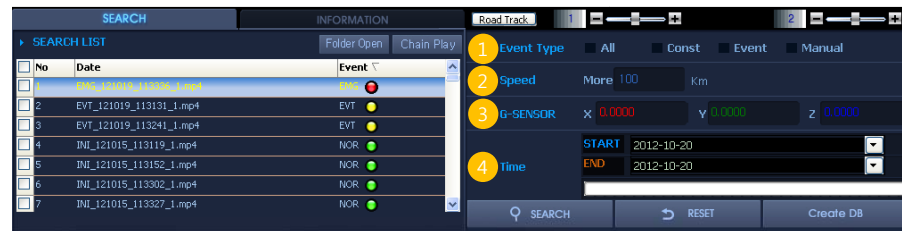
1. Import play list to the Search screen (Reference : 8.6 Open File / Play)
2. Click on "Create DB" to make database
   *Database must be created before searching
3. Select search option and click "Search" button
4. Searched list will appear in Search screen
5. Click on "Chain Play" to play searched file

#	Name	Description
①	Event Type	Select recording type to filter videos with selected recording type
②	Speed	Input speed value to filter videos above selected speed value
③	G-Sensor	Input X/Y/Z G-sensor values to filter videos above selected G-sensor value
④	Time	Input time value to filter videos within time section

8. PC Player Manual

8.9 Screen Composition

#	Name	Description
①	Video Screen	Video play screen of designated video file
②	G-Sensor Screen	G-sensor data of video screen for user analysis
③	Speed-o-Meter / Menu	Display driving speed Button listing for video and menu control
④	Information Screen	Displays file name and recording type Displays GPS information
⑤	Google Map	Displays current position of the vehicle (Internet connection required)

8. PC Player Manual

8.10 Google Map Interface

1. PC Player supports Google Map interface
   Internet must be connected for Google map interface
2. Navigate through Goggle Map with mouse cursor

Number	Description
①	Adjust Map size + : Zoom in - : Zoom out
②	View Mode (Map, hybrid, landscape)
③	Current Position

[NOTE] Depending on Google API policy, service might be disconnected without notice

8. PC Player Manual

8.11 Road Track®

1. Road Track™ shows driving path of selected files. In order to use this function, user must first call in the video files and create a database first.
2. After creating the database, click on [Road Track] button

3. After new map screen appears, press [View] button

4. Use [Hide] button or [Show] button to display or hide driving route in the Google Map
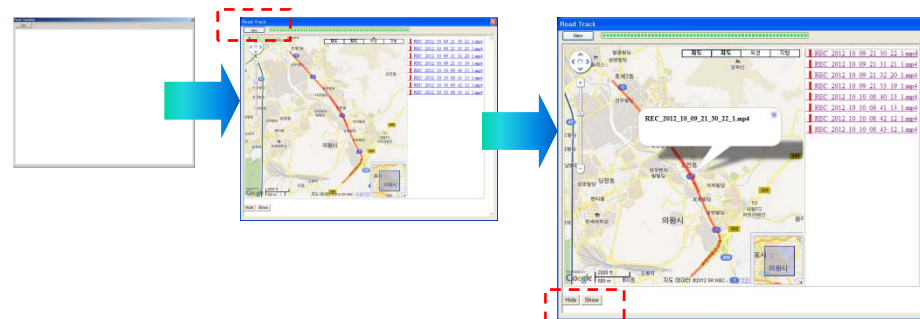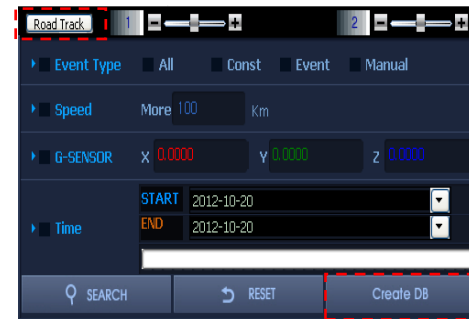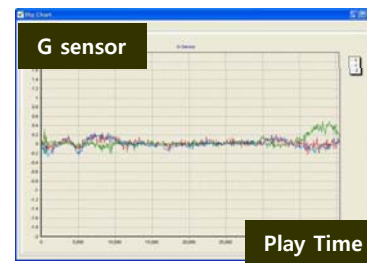
8. PC Player Manual

8.12 Speed/G-Sensor

1. PC Player supports detailed view
   of speed and G-Sensor data
2. Click on "Big Chart" button in the G-sensor
   screen to display below pop-up screens
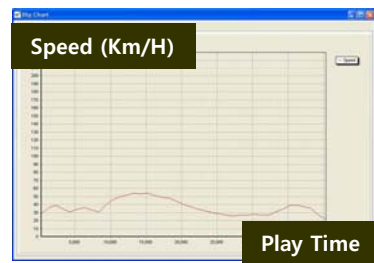
Speed

G-Sensor

G-Sensor data can be used for road conditions or driver's driving pattern analysis

Axis	Description
X-Axis	Display Vehicle's X axis movement - Quick Start / Quick Stop
Y-Axis	Display Vehicle's Y axis movement - Quick Turns
Z-Axis	Display Vehicle's Z axis movement - Up/down movement

8. PC Player Manual

8.13 Screen Capture Print/Save

1. PC Player supports screen capture function which can print / save
   specific screen of user choice
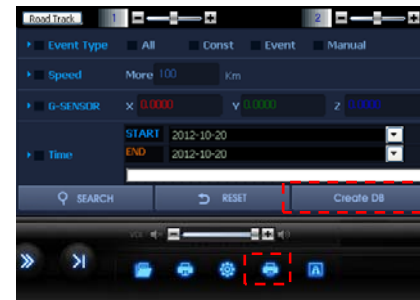2. Click on button to view the screen below
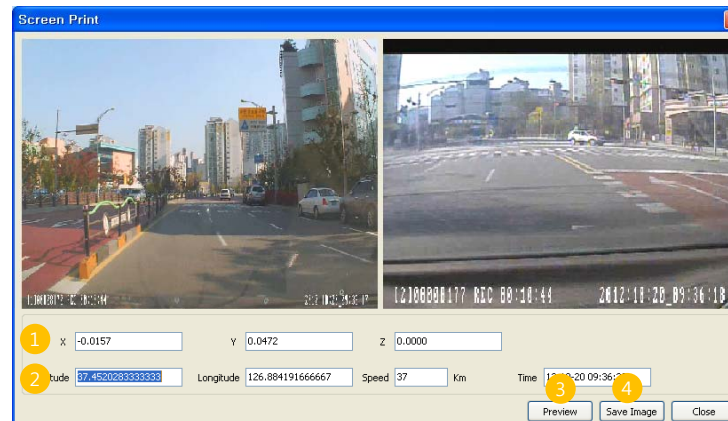
#	Description	#	Description
①	G Sensor Data	③	PRINT button for image print
②	GPS Data	④	SAVE button for create JPEG image file

8. PC Player Manual

8.14 ECO-Driver Report

1. Create database from user selected video files
2. Click "ECO-Drive Report" button

3. Input basic user information and click "Make Report" button to create a report
4. Use "Excel" and "Preview" button to save the report to a file or print

8. PC Player Manual

8.15 Event Report

1. Click on "Event Report" button to retrieve the image capture screen
2. Click on the "Add" button to save 4 different video screen and click on "Next" button
3. Use "Clear" button to remove selected screens
4. Input basic information and click on "Preview" button to create the report
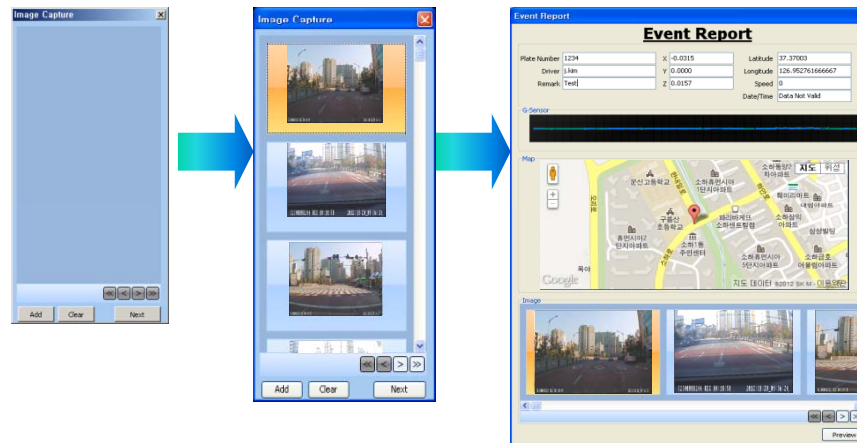
8. PC Player Manual

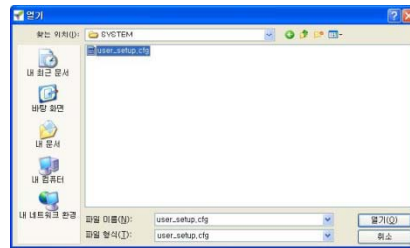## 8.16 Setting - Open

1. Click on ![icon] button
2. Select "system/user_setup.cfg" file
   in your SD Card
3. Click on "Open" button.

8.16.1 Setting - Express
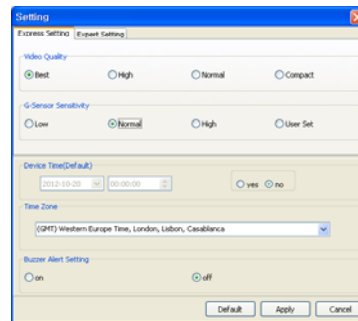
1. Express setting allows for quick and easy
   device configuration

#	Name	Description
①	Video Quality	Video quality setting
②	G-Sensor Setting	G-Sensor sensitivity select (Low = sensitive / High = Dull)
③	Device Time	VIEW-i Lite user must manually set the time
④	Time Zone	Select user time zone
⑤	Sound Setting	Buzzer on/off

2. Click "Apply" button and re-insert SD Card
   to the device to save the changes.

8. PC Player Manual

8.16.2 Setting - Expert
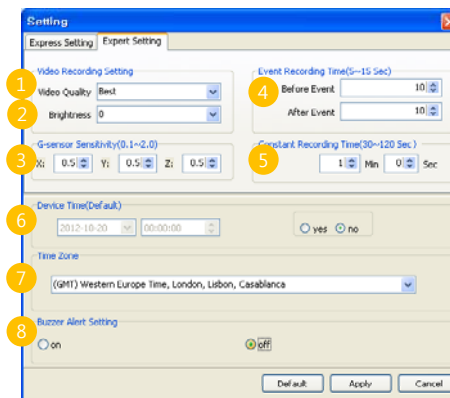
#	Name	Description
①	Video Quality	Best : Use 1CH 1280X720P@30fps Use 2CH 1280X720P@15fps
②	Brightness	(Dark)-4 ~ +4(Bright)
③	G-Sensor Sensitivity	0.1~2.0 (Low=sensitive / High=dull)
④	Event Recording Time	5~10 sec for before and after Event triggers
⑤	Constant Recording Time	30sec~2min
⑥	Device Time	Select user local time
⑦	Time Zone	Select user time zone
⑧	Buzzer	Buzzer on/off

1. Do use Express setting unless you are an advanced user
2. Click "Apply" button and re-insert SD Card to the device to save the changes

9. Product Trouble-Shooting

Symptom	Solution
No Power	Please check power cable connection to the device Please check power cable connection to vehicle power source Please check power switch on the device If all power connections are correct then remove MicroSD Card and re-insert and try again If you have attempted the above remedies, and the device is still not working properly, please contact your dealer
"Ding-ding" sound does not stop	Please check to see if MicroSD card is correctly inserted Please back up and format your MicroSD card (FAT32 / Block size 32Kb) If you have attempted the above remedies, and the device is still not working properly, SD card may have reached its end of product life. Please contact your dealer to purchase new SD card
LED keeps Blinking	LED may blink if there are any problem with SD Card Please back up and format the SD card (FAT32 / Block size 32Kb) If you have attempted the above remedies, and the device is still not working properly, SD card may have reached its end of product life. Please contact your dealer to purchase new SD card
Recording videos does not play correctly	Please check lens for any alien substance. If videos are too dark, please raise the brightness in the setting configuration If you have attempted the above remedies, and the device is still not working properly, please contact your dealer
Recorded files has no sound	Please verify that the mic switch is turned on; orange LED should be lit If you have attempted the above remedies, and the device is still not working properly, please contact your dealer
Event Recording does work	Please check event recording settings in the View-i PC Player setting menu If you have attempted the above remedies, and the device is still not working properly, please contact your dealer
GPS reception does not function correctly	Please check device installation inside the vehicle and install accordingly to the manual Please remove all possible metallic parts from the vicinity of the device If you have attempted the above remedies, and the device is still not working properly, please contact your dealer

10. Specification and Certifications

List	Description
Camera	Internal Front Camera: 2M Pixel CMOS Image Sensor Internal Second Camera: 1.3M Pixel CMOS Image Sensor External Second Camera: 410K Pixel CMOS Image Sensor
View-Angle	Front view angle 120˚ / Internal view angle 140 ˚ / External view angle 120 ˚
GPS	Internal GPS (Option)
G-Sensor	Internal G-Sensor
Video Resolution	1CH : 1280x720 @ 30fps (max) 2CH : 1280x720 @ 15fps (max) / 640x480 @ 15fps (max)
Video CODEC	MPEG4
Recording	Internal MIC
Storage	MicroSD Card (Max 32GB)
PC Viewer	HD PC Player, Windows Media Player, and more
Voltage	12V~24V DC $\pm$10%
Size	52(W) x 94(H) x 18(D)mm
Weight	Less than 68g
Manufacturer	AVIC Imaging Inc. / Manufactured in South Korea
Certification	KCC / FCC / CE

Warranty

Thank you for purchasing AVIC Imaging Inc.'s product.

Product	Car Drive Recorder		
Model	HD – Lite, Pro, Ruby, Topaz		
Name		Serial Number	
Phone		Email	
Address			
Purchase Date		Dealer	

Guarantee

1. AVIC Imaging Inc. grants the following warranty period on the product commencing on the date of purchase.
2. Warranty Period : see store policy

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www.avic.co.kr

Screens and pictures may differ in product use
View-i® HD